

REMARKS

This Amendment is responsive to the Office Action mailed October 26, 2006. Applicants respectfully request consideration of the remarks submitted herewith.

Amendments to the Claims

Claim 1 has been amended to incorporate, in part, the definition of variable Y previously found in claim 5, with the exception that reference to unsubstituted phenyl and to carbocycle are deleted from the definition. Claim 1 is further amended to delete the non-elected subject matter. Specifically, variables A and E are defined as carbon, one of B and D is nitrogen and the other is carbon (i.e., isoquinolines), X is oxygen, and n is zero. In view of this amendment, claim 5 was cancelled. Claims 13-15 recite in separate claims the various definitions of Y recited in amended claim 1.

(The Office Action states that the examined compounds are those where B and D are carbon, and A or E is nitrogen and the other is carbon (i.e., quinolines). Examiner Davis confirmed via telephone that the examined compounds are in fact isoquinolines, and that the Office Action incorrectly stated the examined compounds. Applicants would be grateful if the Examiner could confirm in the next Office Action, or Notice of Allowability, that the examined compounds are the isoquinoline-based compounds.)

Claim 9 has been canceled; claim 10 has been amended to more clearly state a method for treating pain.

Claim 11 has been cancelled and new claim 12 has been added to claim the compound compound N-Isoquinolin-5-yl-N'-[4-(trifluoromethyl)phenyl]urea, which compound falls within the scope of amended claim 1.

Support for the claim 1 amendments is found throughout the originally filed specification and claims. For example, support for the amended definition of Y is found largely in original claim 5 and in the specification at page 5, lines 19-30. Support for limiting phenyl at the Y-position to substituted phenyl is found in the Examples, the majority of which comprise a

substituted phenyl when phenyl is located at the Y position. Support for limiting Y to structures other than carbocycle is found in the Examples, the majority of which do not comprise a carbocycle at the Y position. Support for amending the definition of variable X to be solely be oxygen is found in original claim 2, in the specification at page 5, lines 17-18, and in the Examples, the majority of which comprise oxygen at the X position. Support for limiting N to zero is found in the specification at page 3, line 13, and in the Examples, the majority of which comprise compound wherein n is zero. Finally, support for limiting the variables A, B, D and E such that only isoquinolines are formed is found in the specification at page 6, line 22 through page 7, line 20, and in the Examples, the majority of which comprise isoquinoline-based compounds.

Objection to Claims 1-10

Claims 1-10 are objected to as being drawn to an improper Markush group. In view of the amendment to claim 1 presented and discussed above, wherein the claimed compounds have been limited to those including isoquinoline moieties, the basis for this objection has been removed.

Claim 11 Withdrawn From Consideration, Consider Claim 12

The undersigned confirmed, in a telephone conversation with the Examiner on January 10, 2007, that claim 11 could be considered to the extent that is limited to recite only those compounds falling within the scope of amended claim 1. For the sake of simplicity, claim 11 has been deleted and new claim 12 has been presented. The compound recited in claim 12, N-Isoquinolin-5-yl-N'-[4-(trifluoromethyl)phenyl]urea, falls within the scope of amended claim 1 and therefore it is requested that claim 12 be examined.

35 U.S.C. §112, Second Paragraph

Claim 10 is rejected as allegedly being indefinite. Claim 10 has been amended and is believed to now comply with 35 U.S.C. §112, Second Paragraph. Claim 9 is similarly rejected as indefinite under §112, Second Paragraph, and further under 35 U.S.C. §101 as non-

statutory. Claim 9 has been canceled. In view of the amendments to claim 10 and the cancellation of claim 9, Applicants request reconsideration and withdrawal of these rejections.

35 U.S.C. §102

Claims 1-8 and 10 stand rejected as anticipated by WO03/18028 (Smithkline Beecham) and by Nowak et al. Applicants traverse this rejection.

Nowak discloses a compound comprising an isoquinoline moiety and an unsubstituted phenyl moiety at what would be the "Y" position of the claimed compound. However, amended claim 1 requires that if a phenyl is located at the Y position it is substituted. Because the Nowak compound does not fall within the claim 1 generic formula it cannot anticipate claim 1 or the claims depending therefrom.

The Smithkline Beecham reference is likewise not anticipatory of amended claim 1. Smithkline Beecham discloses an indole structure at what would be the Y position in claim 1. The variable Y in amended claim 1 may be a phenyl or naphthyl group, a heteroaryl group or fused carbocycle group. The Smithkline Beecham reference's indole can be neither phenyl, naphthyl, heteroaryl nor fused carbocycle.

More specifically, "fused carbocycle" is defined in the specification as a cycloalkyl fused to an aryl or heteroaryl (specification, page 11, lines 12-15). "Cycloalkyl" is defined as a carbon rings such as "cyclopropyl, cyclobutyl, cyclopentyl or cyclohexyl" (specification, page 8, lines 21-22). Heterocycles such as pyrrolidines are not included within the definition of "cycloalkyl". Thus, the indoles the Smithkline Beecham reference are not included within the invention's definition of "fused carbocycle".

The Smithkline Beecham indole structure likewise cannot be a substituted form of the phenyl moiety at the Y position. The claimed substituents of the Y-position phenyl are "halogen, C₁₋₄alkyl, C₁₋₄alkoxy, haloC₁₋₄alkyl, haloC₁₋₄alkoxy, phenyl, cyano, nitro, pyrazolyl, di(C₁₋₆alkyl)amino, phenoxy, -OCH₂O- and C₁₋₆alkylcarbonyl". No combination of these substituents results in an indole or any other fused ring system.

Because neither Nowak nor Smithkline Beecham disclose the Y moiety of the claimed compounds, it follows that neither reference discloses the claimed compounds. In view of the above, Applicants request reconsideration and withdrawal of these rejections based on anticipation.

Additional References


Applicants wish to bring to the Examiner's attention certain references previously cited (and later initialed by the Examiner) in Applicant's Information Disclosure Statement submitted January 5, 2006. Referring to each of related publications WO 03/070247 A1, US 2003/0158188 A1 and US 2003/0158188 A1, Applicants request that the Examiner consider these references in detail, including compounds where one of X₂ or X₃ is nitrogen, X₅ is nitrogen, Z₂ is NH, L is cycloalkylene and R₉ is H. It is believed that claim 1 as currently amended is neither anticipated nor rendered obvious by these references. Relevant communications from the European counterpart of the instant application are included in an IDS accompanying this Amendment.

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Attorney for Applicants can be reached at the telephone number and address below. Correspondence should continue to be sent to the address below. Any additional fees or deficiency in fees required should be taken from Merck Deposit Account No. **13-2755**.

Respectfully submitted,

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